Vidifox® Document Camera

PV 380

USER MANUAL

Touchboards
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Please read this User Manual thoroughly before you use the document camera. Keep the CD-ROM in a convenient place so you can use it quickly if you need to.

Please visit us at http://www.waninusa.com where you can get product support, the latest driver updates, and answers to frequently asked questions (FAQs) and technical questions.

PRECAUTIONS

NOTICES: PLEASE READ CAREFULLY BEFORE USE

- Use the document camera under the rated electric conditions.
- Do not place the document camera on any unstable surface. It may fall and cause injuries or damages.
- Do not place this device directly under sunlight or near heaters.
- Do not place this device near water.
- Keep the camera away from acid or alkali gas.
- Do not place this document camera in humid, dusty, windy or vibrant locations.
- The recommended operating environment is:

  Temperature: 32ºF-113ºF (0ºC--45ºC)

  Humidity: less than 75%
- Always unplug BEFORE cleaning the device. Use a damp soft-cloth for cleaning. Do not use volatile solvent.
- When this equipment functions abnormally, such as smoke, smell, noise, immediately unplug and call for professional assistance.
- Unplug the document camera or shut off the power when not in use.

Legal Notice

FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Compilation and Publication Notice

This manual has been compiled and published to cover the latest product's descriptions and specifications. The contents of this manual and the specifications of this product are subject to change without notice.

Wanin USA reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.

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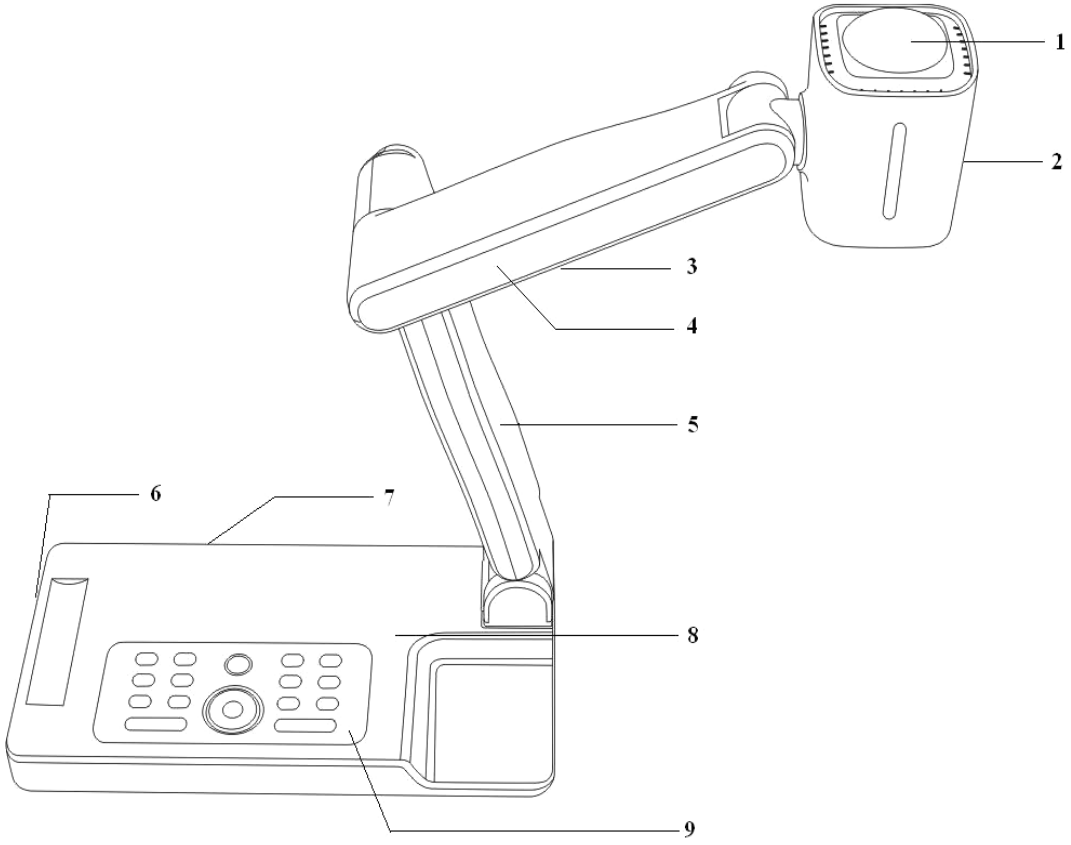
1. PARTS IDENTIFICATION



1. **Remote control IR receiver**
2. **Camera**
3. **LED light box**
4. **Upper mechanical arm**
5. **Main mechanical arm**
6. **Side panel**
7. **Back panel**
8. **Base unit**
9. **Control panel**

2. CONTROL PANEL

1. **POWER**: Turn on/off the power.
2. **HOME**: Activate VGA output terminal, providing the image from camera.
3. **LAMP**: Turn on/off the LED light.
4. **FREEZE**: Freeze/unfreeze the image.
5. **T/P**: Switch the output image between text mode and picture mode.
6. **SPLIT**: Split screen, enable the comparison between the frozen image and live image.
7. **COMPUTER**: Activate the VGA input.
8. **VIDEO**: Activate the C-VIDEO&S-VIDEO output, providing the image from camera.
9. **BRIGHT+/-**: Image brightness adjustment.
10. **PAGE DOWN**: Saved image page down when image recall mode is enabled.
11. **AUTO**: Automatically adjust focus, color and white balance.
12. **SAVE**: Capture and save the current image.
13. **RECALL**: Image recall mode enabled, display the saved images.

    In Image Recall mode:

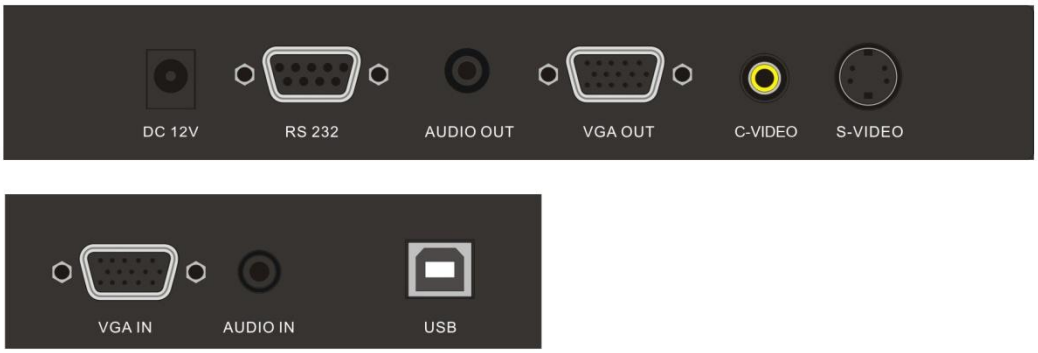
    1: Display the first image.

    2: Display the second image.

    3: Display the third image.

    4: Display the fourth image.
14. **FOCUS+/-**: Adjust focus manually, focus far and focus near.
15. **ZOOM+/-**: Image zoom in and zoom out control.

3. INPUTS AND OUTPUTS



1. **DC 12V**: Power input.

2. **RS 232**: Serial port, to control the document camera from a computer via this port.

3. **AUDIO OUT**: Audio output.

4. **VGA OUT**: VGA (RGB) signal output (15 pin D-SUB).

5. **C-VIDEO**: Composite video output.

6. **S-VIDEO**: S-Video output.

7. **VGA IN**: VGA (RGB) signal input(15 pin D-SUB).

8. **AUDIO IN**: Audio input.

9. **USB**: Capture image into a connected computer via provided software

4. REMOTE CONTROL

1. : Turn the document camera on or off**.**

2. **Computer**: Press this button to output signals from VGA-IN.

3. **Video**: Activate the VIDEO&S-VIDEO output, providing the image from camera.

4. **XGA/SXGA**: Toggle the output format between XGA and SXGA.

5. **Home**: Output the image from the document camera.

6. **Number Buttons**:

In image recall mode:

1: Display the first image.

2: Display the second image.

3: Display the third image.

4: Display the fourth image.

7. : Turn the LED light on or off.

8. **Mir**: Output right-and-left, up-and-down mirror image.

9. **Save**: Capture the current image.

10. **Recall**: Enter the Image Recall mode to display saved images.

11. **Page +/-**: in Image Recall mode, navigate between pages of thumbnail images.

12. **Auto**: Automatic adjust focus, color and white balance.

13. **Split**: Split screen, enable the comparison between the frozen image and live image.

14. **Zoom+/-**: Image zoom in and zoom out control.

15. **Frz**: Freeze/unfreeze the image.

16. **Bri+/-**: Image brightness adjustment.

17. **T/P**: Switch the output image between the text mode and picture mode.

18. **Fc+/-**: Adjust focus manually, focus far and focus near.

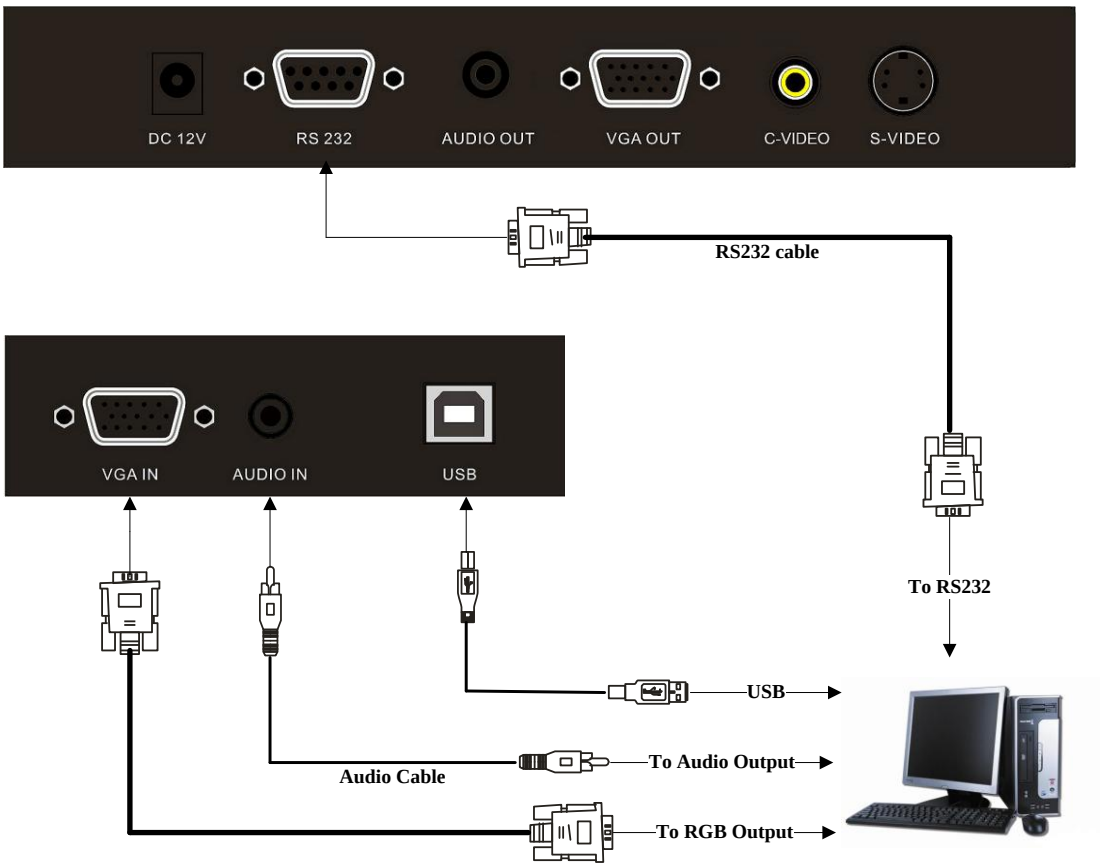
20. **Sharp+/-**: Adjust sharpness of the image.

21. **Blue**+/-: Image color adjustment (blue).

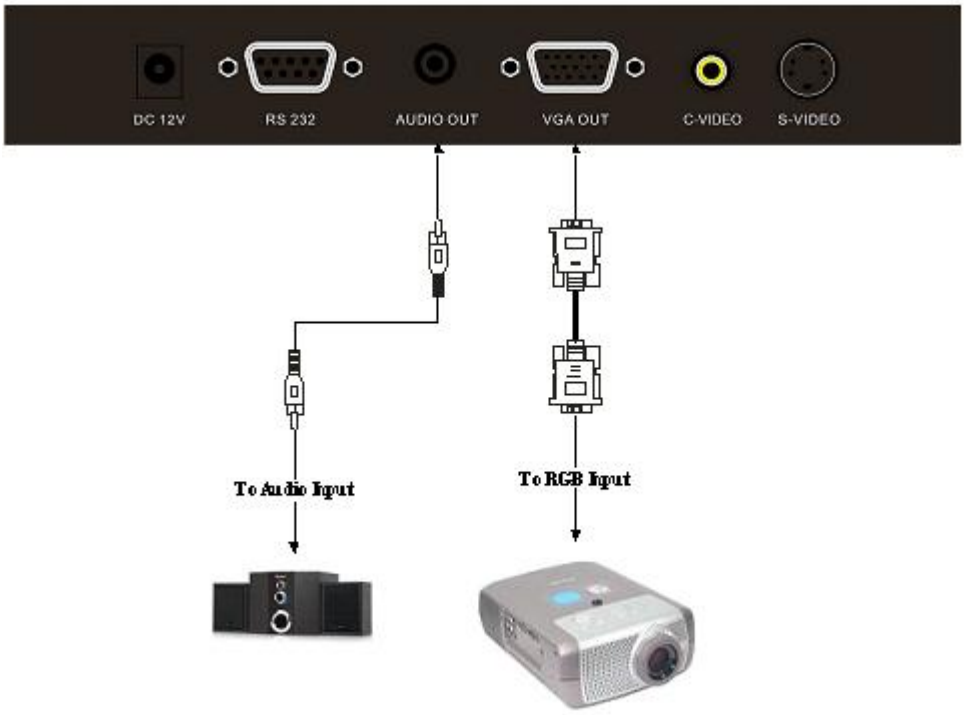
22. **Red**+/-: Image color adjustment (red).

5. CONNECTIONS

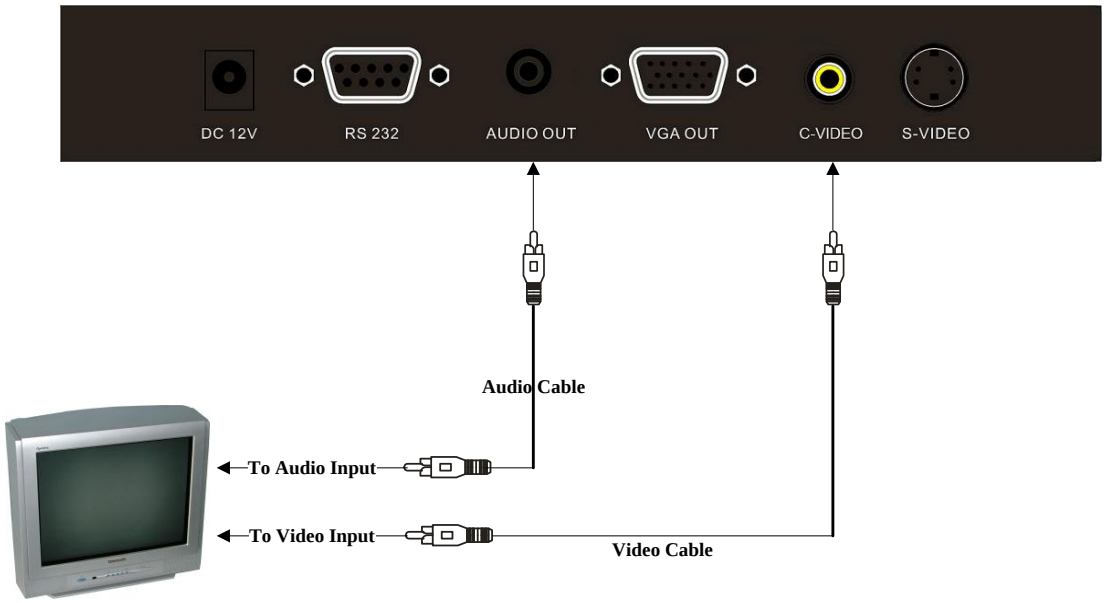
5.1. COMPUTER CONNECTION



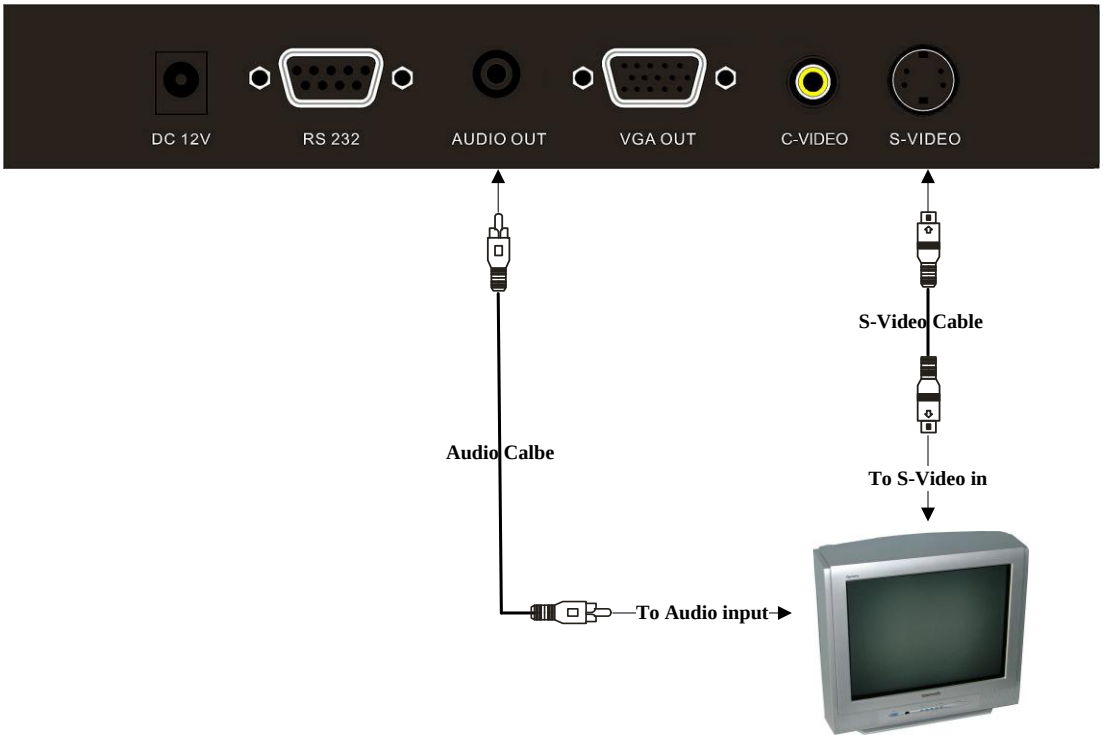
5.2. VGA OUTPUT CONNECTION



5.3. C-VIDEO OUTPUT CONNECTION



5.4. S-VIDEO OUTPUT CONNECTION



6. COMMUNICATE WITH COMPUTER

6.1. COMPUTER REQUIREMENTS

The PC's hardware and software configurations shall not be less than the following requirements：

Operating system: Windows XP

CPU: 1.8 GHz

Physical memory: 512M

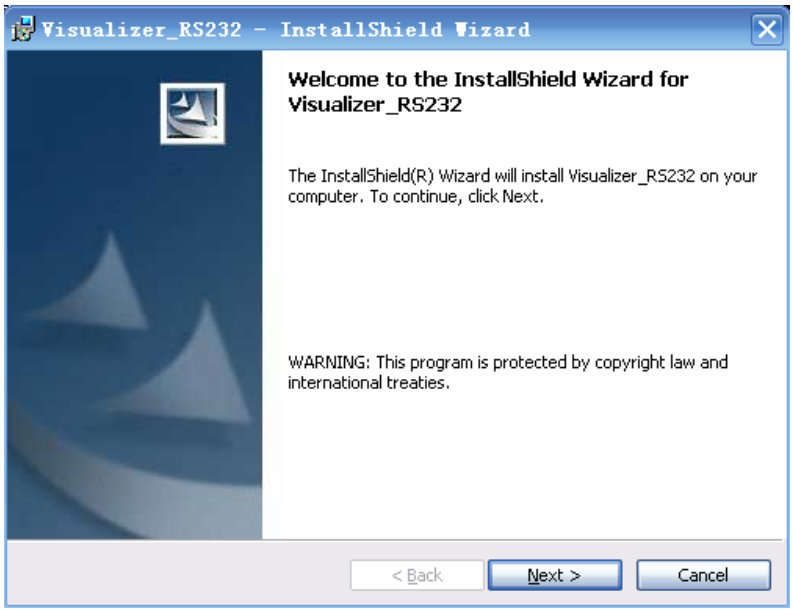
Video memory: 64M

6.2. CONTROL VIA RS232

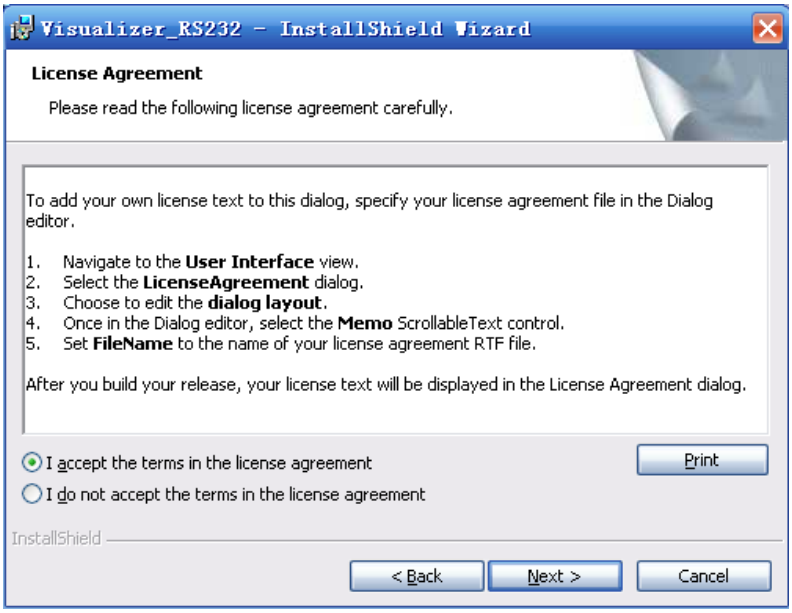
PV 380 can be controlled from a computer via RS232.

1. Double click on the RS232 software in provided CD to run the install shield wizard.

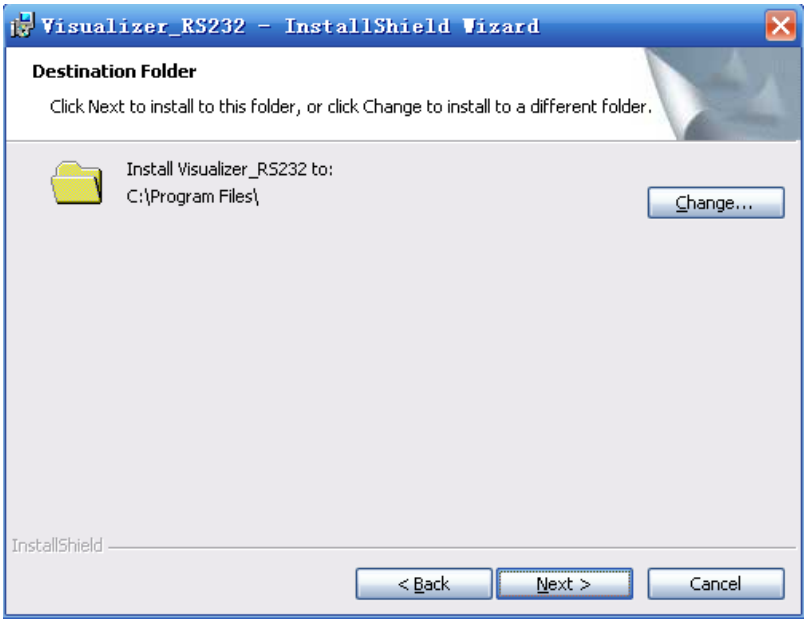
Then you will see the software setup window:


Visualizer_RS232 - InstallShield Wizard
Welcome to the InstallShield Wizard for Visualizer_RS232
The InstallShield(R) Wizard will install Visualizer_RS232 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

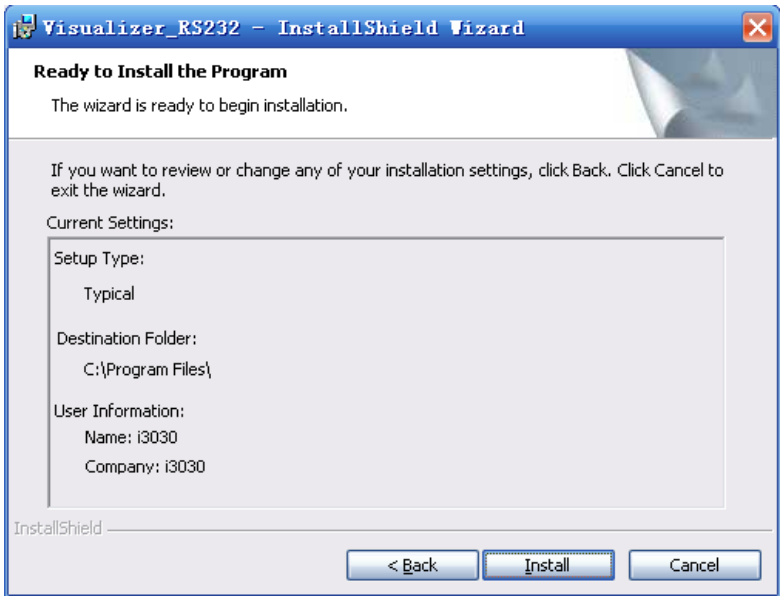
Read terms, select *"I accept the terms in the license agreement*" Click on *Next*:


Visualizer_RS232 - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
To add your own license text to this dialog, specify your license agreement file in the Dialog editor.
1. Navigate to the User Interface view.
2. Select the LicenseAgreement dialog.
3. Choose to edit the dialog layout.
4. Once in the Dialog editor, select the Memo ScrollableText control.
5. Set FileName to the name of your license agreement RTF file.
After you build your release, your license text will be displayed in the License Agreement dialog.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

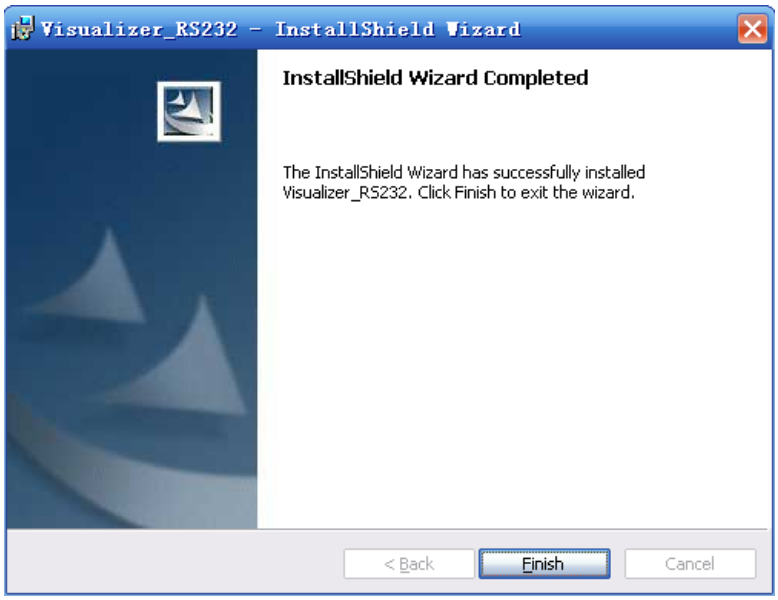
Click on *Change* to change the installation directory if needed, then click on *Next*:



Click on *Install* to install the software to the computer:



Click on Finish, the software installation is complete:


Visualizer_RS232 - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed Visualizer_RS232. Click Finish to exit the wizard.
< Back
Finish
Cancel

2. Connect the computer to the PV 380 with a RS232 cable, turn on the power of PV 380.

3. Double click on or click on *start->All Programs->Visualizer_RS232->Visualizer_RS232.exe* to run the RS232 software, You will see the icon on the task bar and the control interface on the top right of the screen:

: Zoom+

: Zoom-

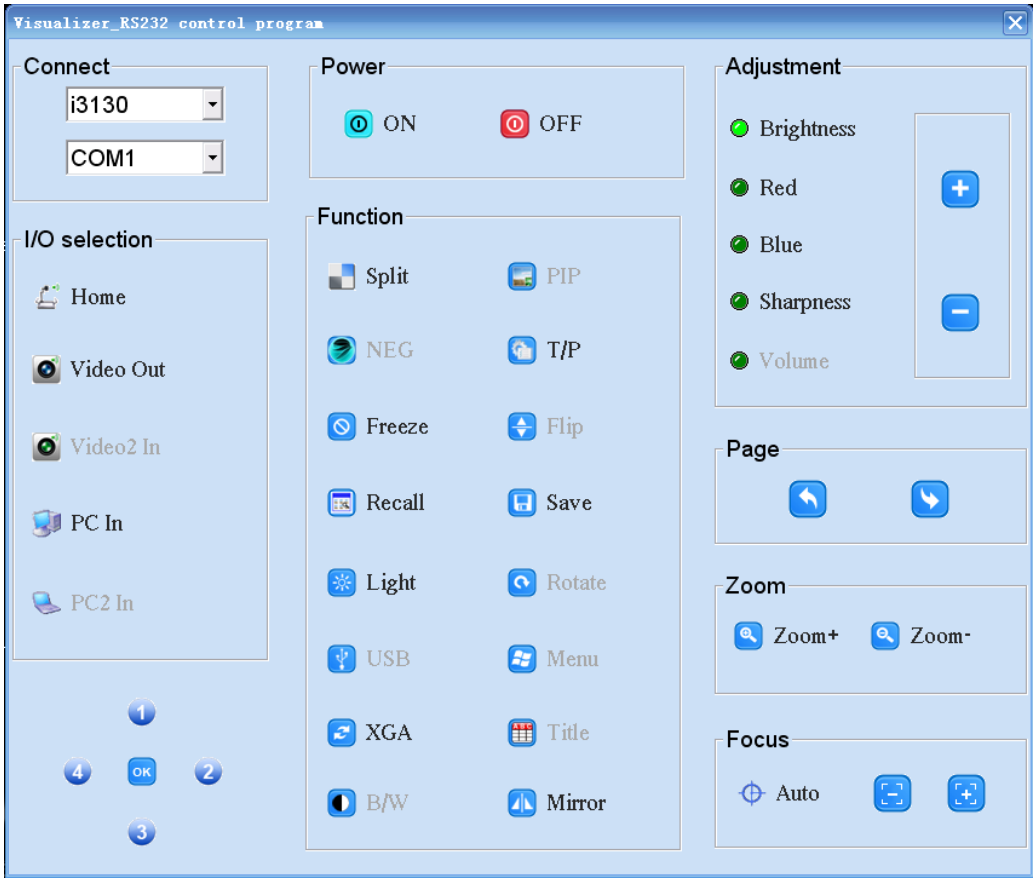
: Auto

: Display all functions

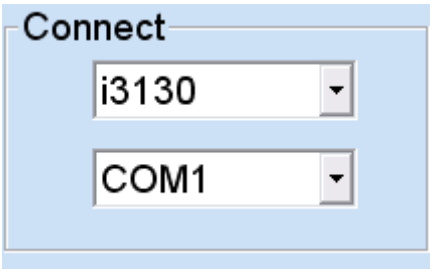
: Minimize

: Close

4. Click on , you will see the following control panel.



5. Properly set the software.



: Select corresponding model number.

: Select the right COM port.

Note:

** If the selected model does not have certain functions, the corresponding buttons in the software interface are displayed in light gray and are not clickable.*

** All models require 15 seconds start-up time to start the software.*

6. Button instruction

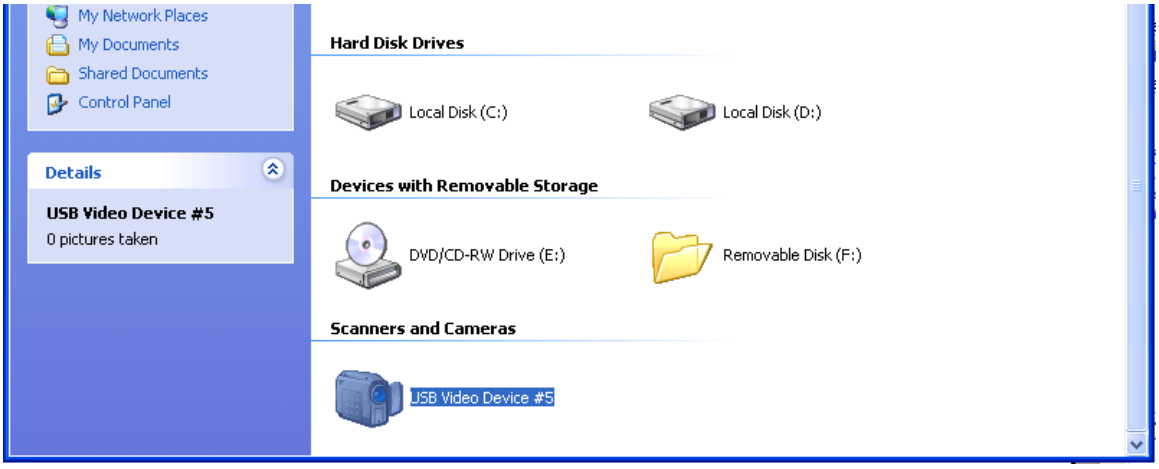
Button	Function
Power On	Power on the unit
Power Off	Standby
Home	Switch to visualize mode
Video Out	Switch to Video/S-Video output
PC In	Active PC input
Freeze	Image freeze
Light	Toggle between arm light and no light
Brightness+	Increase the brightness
Brightness-	Decrease the brightness
Focus+	Focus far
Focus-	Focus near
Zoom+	Zoom in
Zoom-	Zoom out
Page+	Page up
Page-	Page down
Red+	Increase the red hue
Red-	Decrease the red hue
Blue+	Increase the blue hue
Blue-	Decrease the blue hue
Sharpness+	Increase the sharpness

Sharpness-	Decrease the sharpness
Auto	Auto focus, brightness, and color
Save	Save image
Recall	Recall saved images
Split	Split screen
Mirror	Mirror image
T/P	Switch between text and image modes
XGA	Switch between SXGA and XGA output modes
1	Display Image #1(in image recall mode)
2	Display Image #2(in image recall mode)
3	Display Image #3(in image recall mode)
4	Display Image #4(in image recall mode)

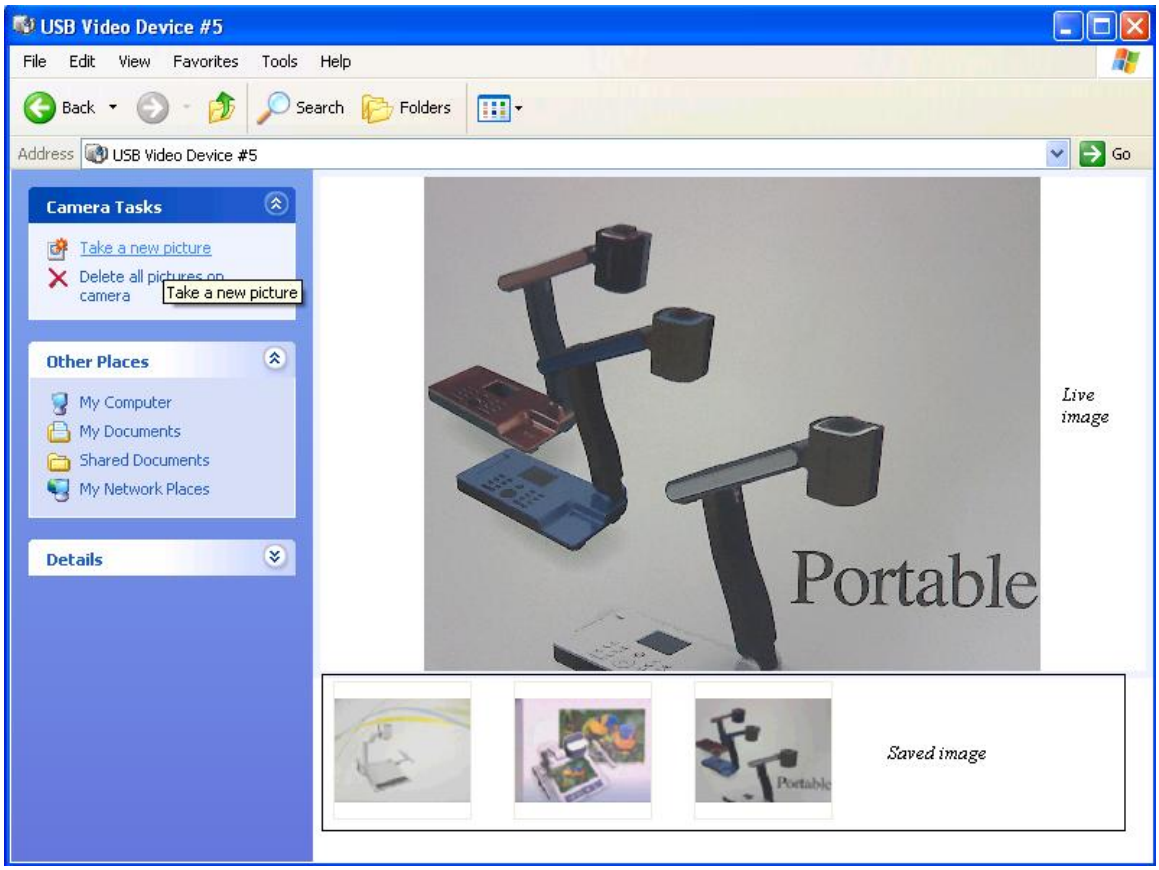
6.2 USB CAMERA

You can capture images and videos on the PV 380 from a computer via USB.

1. Connect the computer and the PV 380 with a USB cable, turn on the power of PV 380.
2. Open *My Computer*, you will see a USB Video Device:

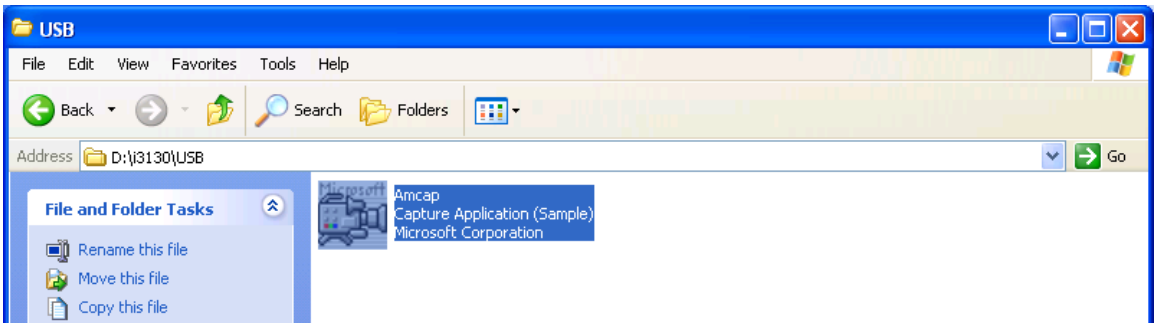


3. Double click on USB Video Device, you will see the following image capture window:



To capture the video, please see the following steps:

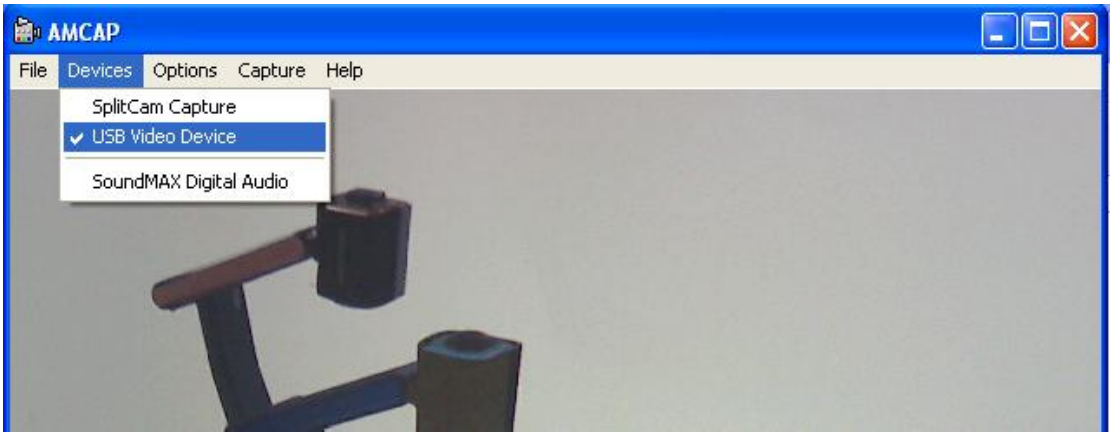
1. Copy the USB software that in the provided CD into the folder PV 380.
2. Open the USB folder, double click to run the USB capture application:

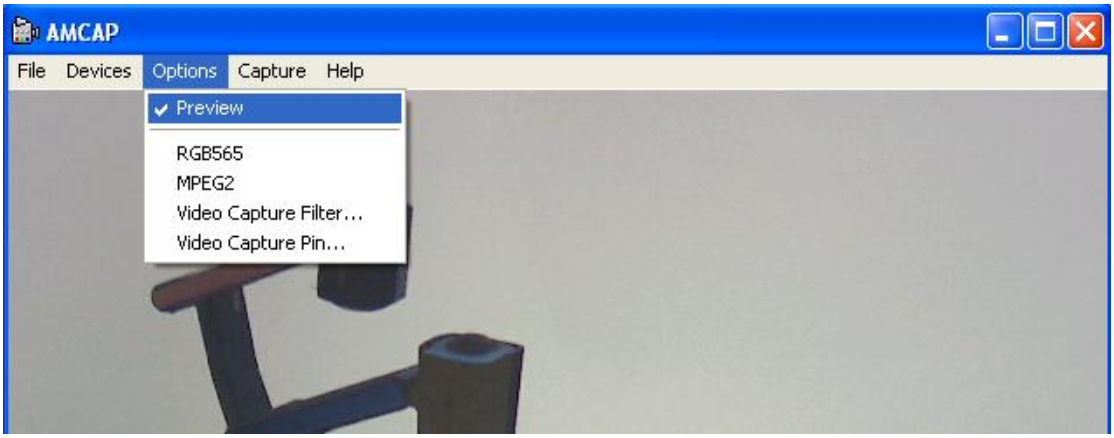


You will see the following window:

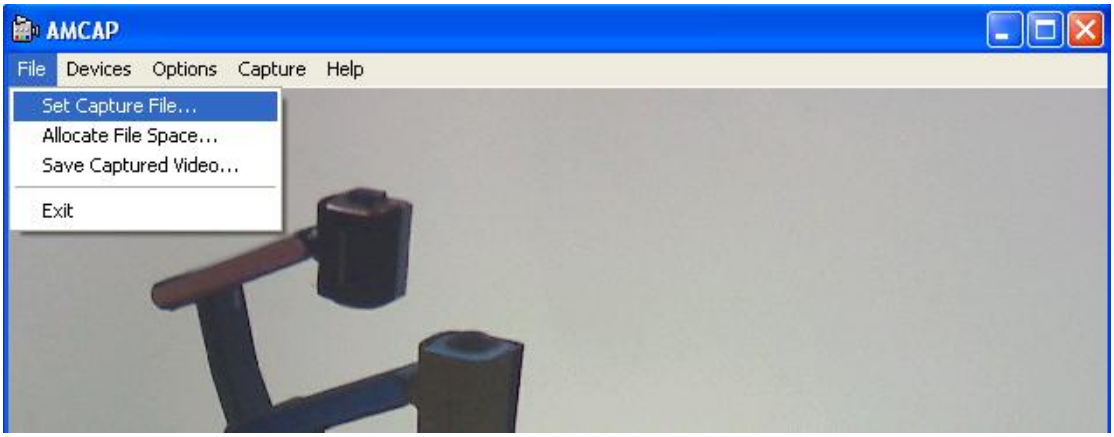
2. Please make sure the software is in properly setting.

Make sure to select *Devices->USB video device* and *Options->Preview.*

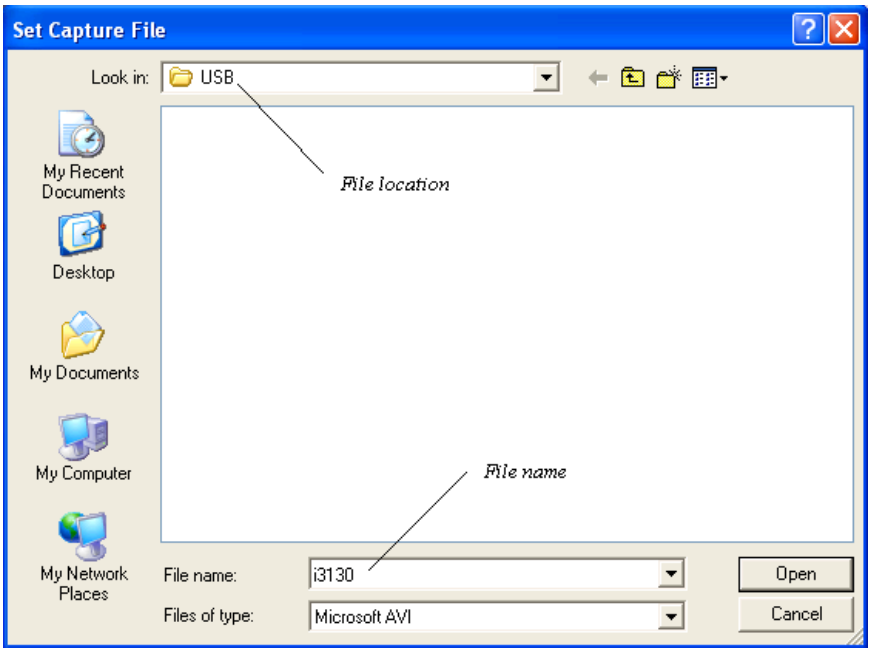




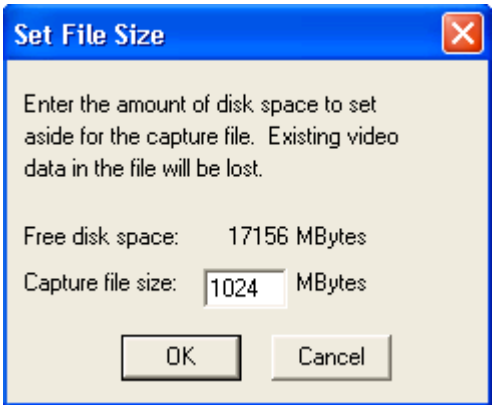
3. Click on *File->Set Capture File* to set the capture file.



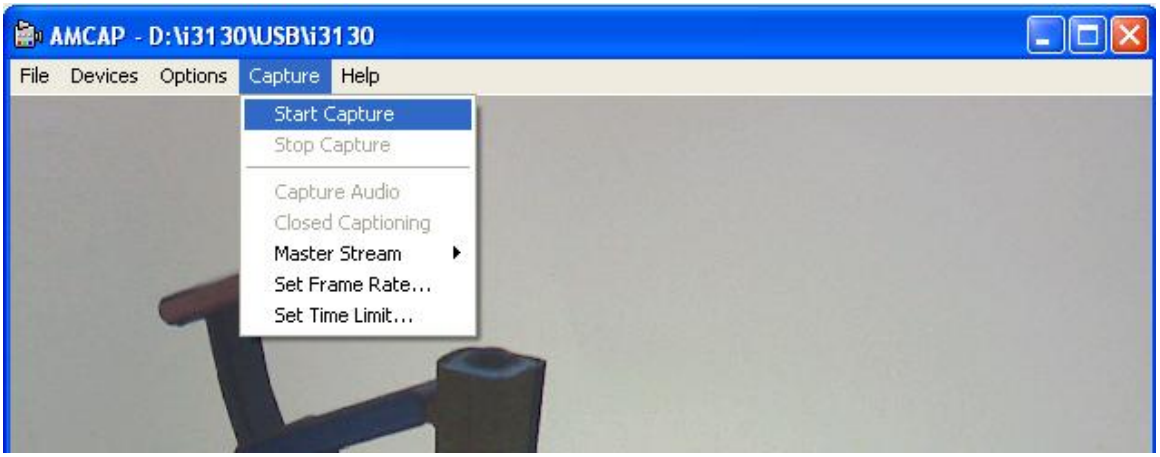
A. Set the location and file name.



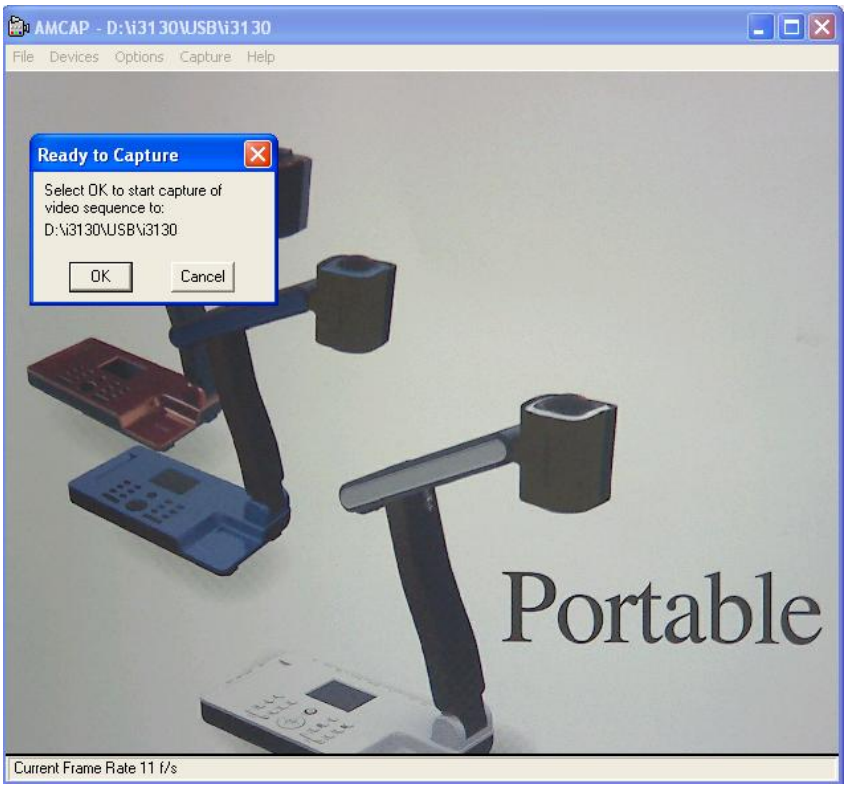
B. Set the file size.


Set File Size
Enter the amount of disk space to set aside for the capture file. Existing video data in the file will be lost.
Free disk space: 17156 MBytes
Capture file size: 1024 MBytes
OK
Cancel

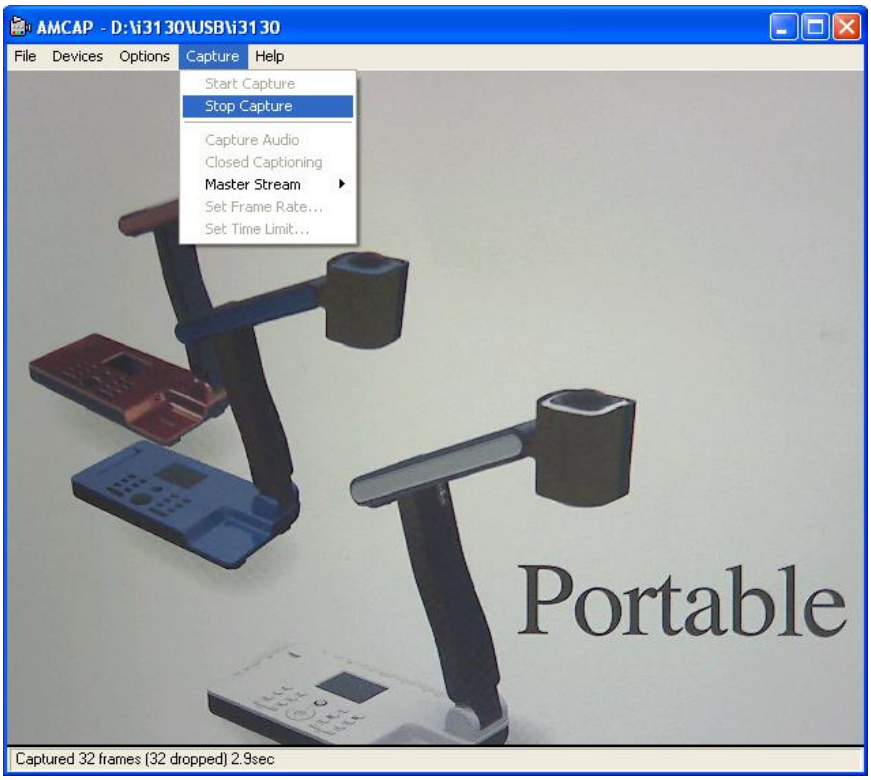
4. Click on OK to finish the setup, then click on *Capture->Start capture* to capture video.



4. You will see the following window, click on OK to start capture.



6. Click on *Capture->Stop Capture* to stop



7. FEATURES

LIGHT

The PV 380 is the environmentally friendly product, it is RoHS compliant, which means it meets the rigorous European Union's requirements for restriction of the use of certain hazardous substances in electrical and electronic equipment. The lighting box of PV 380 adopts eco-friendly, low power consumption and long lasting LED lamps, which is cool to the touch and mercury content free.

ZOOM IN AND ZOOM OUT

9x optical zoom combined with 8x seamless digital zoom, the PV 380 enables you to view the finest details of any objects that are impossible to see with your naked eyes. The PV 380's advanced optical system features high speed auto focus capability that ensures instant auto focus when you quickly zoom in and out of any object. You can also manually adjust focus to satisfy any special viewing needs by pressing "ZOOM+"or "ZOOM－".

FOCUS ADJUSTMENT

When the Visualizer is turned on the focus automatically adjusts to the stage, it is not necessary to readjust the focus if you are only working with flat materials (text, photos, etc.). Only 3D objects

require a focus adjustment. Press the “AUTO” button to auto focus. Press the "FOCUS+" or "FOCUS-" button to focus manually.

BRIGHTNESS ADJUSTMENT

If the image effect is not satisfactory, you can adjust the brightness to get a better image effect. Use the “BRIGHT +” or “BRIGHT -” button to adjust the brightness. To increase the brightness, press the “BRIGHT +” button. To decrease it, press the “BRIGHT -” button.

WHITE BALANCE ADJUSTMENT

Each time the lighting condition changes, the user should adjust the white balance of the image. Press the “AUTO” button to adjust the white balance automatically.

TEXT/PICTURE MODE

The Text enhancement feature provides the option to improve the readability of the text by improve the contrast of the text image via pressing the “T/P” button.

IMAGE FREEZE

The freeze function allows you to discretely prepare the next image without interrupting current presentation. Use "FREEZE" to freeze and unfreeze the image.

IMAGE MIRROR

The mirror function gives you a different perspective of an object.

SPLIT SCREEN

The split screen offers the capability of comparing two images or comparing two different views of one object side by side.

IMAGE SAVE

The PV 380 offers the opportunity of storing 12 images on board. You can recall them by just pressing one of the numerical buttons on the front panel or remote control.

IMAGE RECALL

By pressing the “**Recall**” button, all saved images is displayed in the thumbnail index mode for easy selection.

MULTIPLE INPUTS AND OUTPUTS

The VGA input allows a computer to be connected, inputting the computer signal. PV 380 also implements C-Video and S-Video connector, which can output the image from the document camera.

USB 2.0 PORT

The USB port can be used to store still images from the visualizer in a computer. No additional computer hardware is required. In this way, the visualizer can be used as a 3-D scanner for your computer. Connect the visualizer to your computer with the supplied USB cable. The Visualizer Software is available on the supplied CD-ROM.

USB IMAGE CAPTURE AND VIDEO RECORDING

The PV 380 is the document camera equipped with a USB 2.0 image capture and video recording system. Simply connect the PV 380 to a computer, with the software and driver we provided, you can easily preview, capture and save any images on your PC and Mac.

RS232 CONTROL

The RS232 terminal allows you to integrate the PV 380 into any sophisticated central control system. RS232 also enable you to control the PV 380 via computer.

8. SPECIFICATION

Model	**PV 380**
Sensor	1/3" CMOS
Pixels	2 Megapixel
Zoom	8x optical, 12x digital
Frame rate	15
Shooting area	Max: 13.5"x10.6", Min: 0.1"x0.1"
Focus	Auto/manual
Output resolution	XGA, SXGA
Resolution(Horizontal)	≥750 TV lines
White balance	Auto/manual

Color adjustment	Yes
Brightness adjustment	Yes
Image capture	Yes,12 images
Video recording	Yes(via USB)
Image mirror	Yes
Image split	Yes
Image freeze	Yes
Text mode	Yes
OSD	Yes
Inputs	VGA ×1, AUDIO ×1
Outputs	VGA ×1, C-VIDEO ×1, S-VIDEO ×1, AUDIO ×1
USB2.0	Slave×1(USB camera)
RS232	x1(computer controllable)
Remote control	Yes(360°controllable)
Light source	LED light box
Kensington lock	Yes
Operating temperature	32°F ~113°F
Dimensions	Folded:12.6"×6.6"×3.7", Setup:19.7"×6.6"×19.3"
Power supply	12V DC power adapter
Weight(net)	5.5lbs/2.5kg

9. TROUBLE-SHOOTING:

Symptoms	Possible causes/counter-measures
No image	1. Power cord is not properly connected. 2. Cables are not properly connected. 3. Power switch is not turned on. 4. Change the output resolution.
Image bending	1. Camera not in right position, adjust the camera. 2. Distortion of LCD display, press the “Auto adjust” of the LCD.
Out of focus or blurring	1. The object is too close to the lens.

image	2. Focus is on the top point of zoom, press ZOOM-. 3. Auto-focus is not on: press AUTO again. 4. Fog on the lens in damp climate. It will disappear gradually when the equipment warms up.

If the problem still remains after checking the above, consult your dealer or authorized service personally.

10. PACKING LIST

Item	Quantity
Power cord	1
Power adaptor(12V/2A)	1
VGA cable	1
Switch cable(RCA to mini)	1
USB cable(2.0)	1
Remote control	1
User manual(CD)	1

11. TECHNICAL SUPPORT

Wanin USA is committed to providing highest possible stand of customer service. We can be reached:

By Phone

Call us at 1-877-369-3130. Our technical support staff provides technical assistance from 9:00AM through 5:00PM Pacific Standard Time, Monday through Friday. Please gather the following information before calling:

- Product model name(s) and numbers
- Product serial number(s)
- Detailed questions or problem descriptions.

Online

Technical support is also available online at Wanin USA's web site at www.waninusa.com. You can enter your questions and concerns through our online form, email us at support@waninusa.com.

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